MULTIMEDIA UNIVERSITY

STUDENT IDENTIFICATION NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2017/2018

BFM 1014 – FUNDAMENTALS OF FINANCE

(All sections / Groups)

6 MARCH 2018
2.30 PM – 4.30 PM
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This Question paper consists of 6 pages with 4 Questions only.

2. Attempt **ALL** questions. All questions carry equal marks and the distribution of the marks for each question is given.

3. Please write all your answers in the Answer Booklet provided.

Answer ALL FOUR (4) questions. All questions carry equal marks and the distribution of the marks for each question is given.

QUESTION 1

A. Explain the process of valuing costs and benefits and show with example the relationship between interest rates and the time value of money.

(6 marks)

B. Congratulations, you just won Gold Medallist of Bizz Plan Competition. The prize is a large sum of money by which will be disbursed through three alternative payments.

Option 1	A lump sum (one off) payment of RM 100,000 that will be paid in 10 years
Option 2	Four uneven payments of RM 10,000, RM 40,000, RM 40,000 and RM 10,000 that will be paid in year 2, 4, 6 and 10 respectively.
Option 3	A series of RM 10,000 per year that will be paid at the end of each year for the next 10 years.

Assuming that the current market interest rate is 12%, which alternative will you prefer the most? Calculate and explain.

(12 marks)

C. On a rainy morning, you always having difficulties to go the nearest MRT station for work. Due to your budget constraints, you decided to sign a hire purchase loan of RM 13,800 to purchase a second hand car. What will be your monthly payment amount if the loan is for four years at 7.5 percent interest?

(7 marks)

[TOTAL 25 MARKS]

QUESTION 2

A. Galaxy Corporation just issued a RM 1,000 face value bond that currently has a yield to maturity of 6.69 percent. The bond matures in three years and pays interest annually. The coupon rate is 7 percent.

i. Calculate the coupon payment of the bond.

ii. Calculate the current price of this bond.

iii. If Galaxy Corporation need to raise RM 3 million for their new expansion project, how many units of bond should Galaxy Corporation issue?

(10 marks)

B. Nike's common shares are currently trading at RM 57.12. Dividends on this stock are paid annually and are expected to grow at 2% per annum forever. Shareholders required return on this investment is 3%. The most recent dividend was paid yesterday and the next dividend will be paid in one year. How big was yesterday's dividend?

(5 marks)

C. Betty is contemplating purchasing shares in Daily Bugle Corp. and holding them for 2 years, at which time she will sell them. The market price of these shares is expected to be RM 36.50 in two years (after the second dividend). The next two annual dividends are expected to be: D1=RM 1.00 and D2=RM 1.20. The first dividend will be paid in one year and the second in two years. Betty requires a return of 11%. What is the maximum price Betty is willing to pay for shares in this company?

(10 marks)

[TOTAL 25 MARKS]

Continued...

QUESTION 3

A. What is the difference between capital structure and capital restructuring? Briefly explain on how Financial Manager can try to maximize stockholder wealth using a leverage.

(5 marks)

B. As the Chief Financial Officer of a public listed company Prima Home Company, your team had prepared the following summary of potential future housing development investment that your company can consider in 2018.

	Project Sinar	**Project Cahaya**	**Project Suria**
Initial investment	RM 16 millions	24 millions	40 millions
Present value of all future cash flows	36 millions	90 millions	116 millions

i. Based on Profitability Index (PI), which project do you choose?

ii. Based on Net Present Value (NPV), which project do you choose?

iii. Assuming the options are mutually exclusive projects, which project should your company choose?

iv. Assuming the projects are independent projects, with a limited budget of RM 40 million, which projects should your company choose?

(10 marks)

C. Based on the information provided, calculate the WACC of PJ Roast Bhd.

Debt	12,000, 7% coupon bonds outstanding, with 10 years to maturity and trading at 103 percent of par. Bonds make semi-annual payments. YTM is 6.6%
Ordinary shares	300,000 shares outstanding, selling at RM 70. The share has a beta of 0.95 and just paid dividend of RM3.50. The dividend is expected to grow by 6% every year indefinitely.
Preferred shares	8,000 units of 5% preferred shares outstanding, selling for RM90 per share.
Market	10% market return, 3.5% risk-free rate, and 30% tax rate.

(10 marks)

[TOTAL 25 MARKS]

QUESTION 4

A. Cash is the lifeblood of any business and business needs to generate enough cash to sustain the operation. What are the **FOUR (4)** motives of holding cash?

(4 marks)

B. In 2017, Tiger Synergy Sdn. Bhd. has an operating cycle of 90 days and cash cycle of 40 days. It collects on a sale in 45 days. The beginning balance of its accounts receivable is RM11,000 while the ending balance is at RM15,000. Its beginning inventory balance is RM6,000 and the ending inventory balance is RM9,000. The beginning accounts payable is RM8,400.

Using the details and 365 days per year, calculate the following (show your workings):

i. Credit sales

ii. Cost of goods sold

iii. Ending accounts payable amounts of Tiger Synergy Sdn. Bhd

(12 marks)

Continued...

C. PRU Bhd. starts its production period with 2,500 LCD Monitors (LCD) in store. This inventory is depleted every 2 weeks and subsequently reordered. The carrying cost per LCD is RM2 and the fixed order cost is RM200. Based on 52 weeks per year, evaluate PRU Bhd.'s inventory management.

a. Carrying cost
b. Restocking Cost
c. Economic Order Quantity
d. Optimal order frequency
e. Is PRU Bhd 's current inventory management is efficient? Justify.

(9 marks)

[TOTAL 25 MARKS]

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APPENDIX

Future Value:

$FV = PV(1 + r)^t$

Annuities

$$PV = PMT\left[\frac{1-\frac{1}{(1+r)^t}}{r}\right]$$

$$FV = PMT\left[\frac{(1+r)^t-1}{r}\right]$$

Perpetuity: PV = PMT / r

EAR & APR

$$EAR = \left[1+\frac{APR}{m}\right]^m - 1$$

$$APR = m\left[(1+EAR)^{1/m} - 1\right]$$

Bond Pricing

$$\text{Bond Value} = C\left[\frac{1-\frac{1}{(1+YTM)^t}}{YTM}\right] + \frac{F}{(1+YTM)^t}$$

Stock Value

$$\hat{P}_0 = \sum_{t=1}^{\infty}\frac{D_t}{(1+R)^t}$$

Estimating Dividends

Zero growth: $P_0 = D / R$

Constant Growth Stock: $D_t = D_0(1+g)^t$

Dividend Growth Model:

$$\hat{P}_0 = \frac{D_0(1+g)}{R-g} = \frac{D_1}{R-g}$$

Nonconstant + Constant growth

$$\hat{P}_0 = \frac{D_1}{(1+R)^1} + \frac{D_2}{(1+R)^2} + \frac{D_3}{(1+R)^3} + \ldots + \frac{D_\infty}{(1+R)^\infty}$$

Net Present Value

$$NPV = \sum_{t=0}^{n}\frac{CF_t}{(1+R)^t} - CF_0$$

Cost of equity

$$R_E = R_f + \beta_E(E(R_M) - R_f)$$

WACC

$= E/V \times R_E + P/V \times R_P + D/V \times R_D(1 - T_C)$

Operating cycle

= inventory period + accounts receivable period

Cash Cycle

= Operating Cycle – Accounts payable period

EOQ Model

$$Q^* = \sqrt{\frac{2TF}{CC}}$$

End of Paper.